

yumeng ma

HUMAN-COMPUTER INTERACTION (HCI) · HUMAN-AI INTERACTION · ACCESSIBILITY · VISUAL & SOCIAL COMPUTING

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Education

University of Washington

PHD IN COMPUTER SCIENCE AND ENGINEERING (HCI)

Advisor: Jacob O. Wobbrock

Seattle, WA

2024 - Present

Brown University

Sc.M IN COMPUTER SCIENCE

GPA: 4.0 / 4.0

Advisor: Jeff Huang

Providence, RI

2022 - 2024

Arizona State University

B.S. IN COMPUTER SCIENCE AND PSYCHOLOGY

Barrett Honors College

GPA: 4.0 / 4.0 Summa Cum Laude

Thesis: "Assessing Exhibit Interaction through Bridging the Connections Between Biometrics and Traditional Tools"

Tempe, AZ

2019 - 2022

Publications

* denotes equal contribution

1 paper in submission to IEEE

First-author paper accepted to CHI 2026: Quantifying the Novelty Effect When Evaluating Interactive Prototypes. Preprint coming soon!

CONFERENCE PROCEEDINGS

Zainab Iftikhar, **Yumeng Ma**, and Jeff Huang. 2023. “Together but not together”: Evaluating Typing Indicators for Interaction-Rich Communication. In Proceedings of the 2023 Conference on Human Factors in Computing Systems (CHI ’23). [paper](#)

Ian Gonsher, **Yumeng Ma**, Ivan Pineda-Dominguez, Matthew Lee, and Yuxin. 2023. The Mixed Reality Passthrough Window: Rethinking the Laptop Videoconferencing Experience. Human Interaction and Emerging Technologies (IHET-AI 2023): Artificial Intelligence and Future Applications. [paper](#)

SHORT PAPERS & EXTENDED ABSTRACTS

Yumeng Ma* and Jiahao Ren*. 2023. ProactiveAgent: Personalized Context-Aware Reminder System. In The 36th Annual ACM Symposium on User Interface Software and Technology (UIST ’23 Adjunct). [paper](#)

Research Experience

UW ACE Lab

GRADUATE RESEARCH ASSISTANT, ADVISED BY PROF. JACOB WOBBROCK

Seattle, WA

2024 - Present

- Currently collaborating with Microsoft on benchmarking AI-generated code to identify accessibility gaps and improve its reliability for inclusive web development.

Brown Department of Neuroscience

COMPUTER VISION RESEARCH ASSISTANT, ADVISED BY PROF. MICHAEL PARADISO

Providence, RI

2023 - 2024

- Built a visual prosthesis system for blind and low vision users to locate everyday objects and identify surrounding text.

UCLA HCI Lab Los Angeles, CA

HCI RESEARCH INTERN, ADVISED BY PROF. XIANG 'ANTHONY' CHEN

2023

- Led the development of a proactive reminder system that takes in user context, history, and spoken interactions by leveraging LLMs and personal agents.

Brown Department of Engineering Providence, RI

DESIGN RESEARCH ASSISTANT, ADVISED BY PROF. IAN GONSHER

2022 - 2023

- Introduced a new paradigm for the integration of AR into laptop and desktop displays to enable local users to interact more easily and seamlessly with remote users during videoconferencing sessions.

Brown HCI Lab Providence, RI

DISTRIBUTED RESEARCH EXPERIENCES FOR UNDERGRADUATES, ADVISED BY PROF. JEFF HUANG

2022

- Designed novel typing indicators and found that they enhance user co-presence in written communication through mixed method analysis.

ASU SoLET Lab Tempe, AZ

PSYCHOLOGY RESEARCH ASSISTANT, ADVISED BY DR. DANIELLE McNAMARA

2022

- Conducted testing and evaluation of tutoring systems to optimize learning and educational practices for underrepresented groups.

NASA Psyche Mission Tempe, AZ

HCI RESEARCH ASSISTANT, ADVISED BY PROF. MARIA ELENA CHAVEZ ECHEAGARAY

2021-2022

- Developed a web app that allows users to interact with the Psyche Spacecraft model and led user studies with biometric data analysis that showed the app increased public engagement.

Work Experience

Infosys

RESEARCH INTERN, APPLIED RESEARCH CENTER FOR AUTONOMOUS MACHINES TEAM 2025

- Conducted design research on autonomous vehicle interfaces and created graceful degradation strategies using multimodal hazard escalation storyboards and user studies.

Infosys

UX DESIGN INTERN, LIVING LABS TEAM 2024

- Spearheaded the design of an accessible phygital UI that integrate emerging AI trends to optimize retail experiences for diverse user personas.

Brown + NASA

MOBILE DEVELOPER Providence, RI

2023 - 2024

- Led and developed a sound and haptic-enabled cross-platform mobile app to help blind and low vision individuals explore and learn about space.

Civilience

PROJECT MANAGEMENT & UX DESIGN INTERN | LIAISON BETWEEN FRONTEND AND UIUX 2023

- Led the UI/UX team to design a web-based app with interactive health data visualizations and built reusable components for a consistent design system across the product

Awards, Fellowships, & Grants

2025 **Microsoft Research Grant**, Microsoft & CREATE at UW

2024 **NSF Graduate Research Fellowship**, NSF

2024 **Paul G. Allen School Fellowship**, UW

2019 - 2023 **Microsoft DisAbility Scholarship**, Microsoft

2022 **Google CS Research Mentorship Program Fellowship**, Google

Teaching

Winter '26 **CSE 443 Digital Accessibility**, TA for Jennifer Mankoff, UW

Spring '22 **CSE 365 Information Assurance**, TA for Adam Doupe and Tiffany Bao, ASU

Extracurricular & Work Activities

2022 - 2024 **Master's Representative**, Brown University CS Diversity Committee

Providence, RI

2023 **Student Volunteer**, UIST

San Francisco, CA

2020 - 2021 **Microsoft Support / Xbox Advocate Contract**, Microsoft

Tempe, AZ